# HIV & AIDS, year 1, day 1

Grade 4 or 5, Lesson #15

# **Time Needed**

45-60 minutes

### Student Learning Objectives

To be able to:...

- 1. Distinguish between healthy concern and unhealthy fear.
- 2. Understand that HIV is hard to catch, affects few children and is preventable.
- 3. Distinguish between illnesses caused by germs and those caused by other factors (i.e., genes, chemicals).
- 4. Define "communicable disease" and give examples.
- 5. Discuss ways in which HIV is and is not passed.

# Agenda

- 1. Discuss with class possible reasons why HIV & AIDS are very important topics in the media.
- 2. Discuss the difference between healthy concern and unhealthy fear.
- 3. Emphasize:
  - Children your age rarely have HIV.
  - o HIV is very hard to get.
  - HIV is preventable.
- 4. Distinguish between non-communicable and communicable disease.
- 5. Describe the transmission modes for HIV, and emphasize that casual contact cannot pass the disease.
- 6. Take questions from the class.
- 7. Use the Crossword Worksheet to review concepts.

This lesson was most recently edited on July 123, 2013. Alternative formats available upon request.

# **Materials Needed**

# Student Materials: (for each student)

Crossword Puzzle Worksheet

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### Activities

# 1. Discuss with class possible reasons why HIV & AIDS are very important topics in the media.

I know that most of you have heard about HIV and AIDS. It seems that news about HIV and AIDS is often on T.V., in the papers, in magazines. There are many other serious diseases in our world, like cancer and heart disease. Why do you think people are talking and writing a lot about HIV?

Possible responses: People die from it. There is no cure. People are scared of it. Younger people get it.

Be clear with students that it's not as common as many less-talked-about illnesses (like heart disease, cancer, etc.)

HIV and AIDS are very serious. There is no cure for it yet, and it can be fatal. It is out of control in many countries in the world, so it is a global problem. It is killing people in their 20's, 30's and 40's, the time when they would normally be working at their jobs, enjoying their loved ones and doing things to make our world a better place to live. In some parts of the world, HIV is spreading very fast. The number of people who have the disease grows every year even though, compared to many other diseases, it is still fairly rare in the U.S. All this makes many people very concerned. Many other people are scared.

It is good to be concerned. When people are concerned, they are able to help. Some concerned people are looking for a cure for people sick with HIV. Other concerned people are searching for a vaccine, a medicine to give to healthy people (like you) to protect against this disease. Other concerned people volunteer their time, helping people with AIDS to live their lives as comfortably and joyfully as possible. Other concerned people learn how to be more careful with their own health.

#### 2. Discuss the difference between healthy concern and unhealthy fear.

So concerned people can accomplish things. Usually, scared people cannot. What happens to most of us when we get scared?

Possible responses: We freeze. We can't think clearly. It's hard to decide what to do. We run away from things. We hide. We get angry.

Often, people are frightened of things that they don't understand, things that seem strange and unfamiliar. That's what has happened with HIV and AIDS. At first, we didn't know much about the disease. Now we do, but some grown-ups still worry a lot about it. People worry about how they can catch it. People worry because they want themselves and their family and friends to stay well. Some people are scared because there have been a lot of rumors going around about HIV. Rumors make people confused.

#### 3. Emphasize why students should be concerned rather than fearful.

One of the most important things I want you to learn today is that you definitely don't have to be scared about HIV and AIDS. Here are some reasons why:

- We know a lot about HIV. We don't have a cure, but we know what causes it.
- We know that even though HIV is making many adults very sick, it generally does not affect children your age, at least not in wealthy countries like the United States.
- We know that HIV is very, very hard to get. You can't get it by just being close to someone who has it even by giving them a hug.
- We know that HIV is preventable. When you know how people can and cannot catch it, you'll know how to keep yourself safe.

#### 4. Introduce and distinguish between communicable and non-communicable diseases.

HIV is a tiny germ called a virus. Germs that pass sicknesses around are small micro-organisms which are invisible to us. Many sicknesses are caused by germs, but many are not. Let's first take a look at other things (besides germs) that could cause an illness. Who can think of something?

Use chalkboard or transparency to record their answers into these categories of things that cause illness:

GENES - from the mother or father. (Genes are the little chemical plans within sperm and egg cells ... plans for a new human being ... their hair color, the shape of their ears, etc.)

MALNUTRITION - not having enough good food to eat, not enough of a particular vitamin or mineral

CHEMICALS - certain drugs, like alcohol, tobacco. Sometimes people are exposed to other chemicals at their workplace.

RADIATION from too many x-rays, or from a nuclear power plant (Japan)

If a person became ill from one of these situations, could they pass the sickness on to another person?

ANSWER: In most cases, No. These kinds of illnesses would affect only the particular people exposed, except in the case of pregnancy.

But we know that there are many, many sicknesses that can be passed from person to person. They are called COMMUNICABLE or CONTAGIOUS DISEASES. What do we mean when we talk about communication?

ANSWER: A person makes contact with another person. They indicate an interest in the other person. They may talk to, touch, look at, and/or smell the other person.

So, with communicable diseases, people play a part in passing the disease around from one to another. Some diseases can be spread through direct contact - that means things like kissing or touching - or through indirect contact - like breathing in the germ mist from a person's sneeze or cough.

Indirect contact might also be touching things that have been used by an infected person like their toothbrush or food or silverware.

There are several types of these tiny organisms. Let's look at some of them:

bacteria fungi viruses parasite protozoa

Think about some communicable diseases that you know about, illnesses that we could catch from each other. I'll write them on the board next to the kind of germ that brings it into our body. Who can tell us one?

<u>Germs</u>	Illnesses
Bacteria -	pneumonia, strep throat
Viruses -	cold, flu, measles, chicken pox, HIV, mumps, pneumonia
Protozoa -	"camper's diarrhea", malaria
Fungi -	athlete's foot, ringworm, thrush, "diaper rash"
Parasites -	tapeworm, fleas, head lice, ticks

Some of these same germs can be found in water when it is polluted by garbage or sewage (when toilets drain into lakes and rivers that people drink from). In the U.S., drinking water goes through a special treatment process to make it safe, but many countries in the world, those that are poor, frequently have contaminated (unsafe, unclean) drinking water. Some germs can also contaminate food, and disease can spread that way. This could happen if food is not refrigerated or cooked well. What's another way that disease can be spread that we haven't mentioned? Yes. By insects. They can carry certain germs. An insect could land in sewage and then on food. If someone ate that food, they might become sick.

O.K. we've looked at non-communicable diseases (which people don't pass to each other) and communicable diseases, those which we can give to another person. We said that HIV falls into which group? Correct, it's communicable. And which type of germ spreads HIV? Right, a virus.

#### 5. Describe the transmission modes for HIV.

HIV is different from most of the other communicable diseases because it is very, very hard to catch. It does not pass through the air. We can't get it from being in the same room with an infected person. We can't get it by touching or hugging. We can't get it by sharing pencils or hairbrushes or even food. We can't get it from an infected person coughing or sneezing on us or by drinking from the person's cup.

HIV is generally passed in three ways. It can be passed when someone has sex with an infected person; when someone shares needles with an infected person to shoot up drugs; and from an infected woman to her baby during pregnancy, at birth or if she breastfeeds her baby.

So, you can see why I said at the beginning that very few children your age in wealthy countries like the U.S. have HIV:

- Now that we can treat pregnant women who have HIV, fewer babies catch it from their mothers. We can't cure the mothers, but we can cut down the chances of the baby becoming infected.
- Some children in the U.S. used to catch HIV during blood transfusions, when they were in the hospital for a surgery or because they needed help with another illness. This happened because, until 1985, we had no test to make sure that blood (in the blood banks) was safe. Now we do have blood tests, so the chance of a person getting HIV from a transfusion is very, very small.
- And most people your age don't have sex or shoot drugs. Those are things adults might do.

In poorer countries, where there isn't enough money for health care, doctors sometimes have to reuse needles. They can't always afford the equipment to sterilize them. And there isn't money for medicines for pregnant women. Or even money for classes like this, to teach people how to stay safe. But children like you, in the U.S., who are careful and grow up making good decisions, can be safe from catching HIV.

#### 6. Respond to students' oral and written questions.

#### 7. Use the Crossword Worksheet to review concepts.

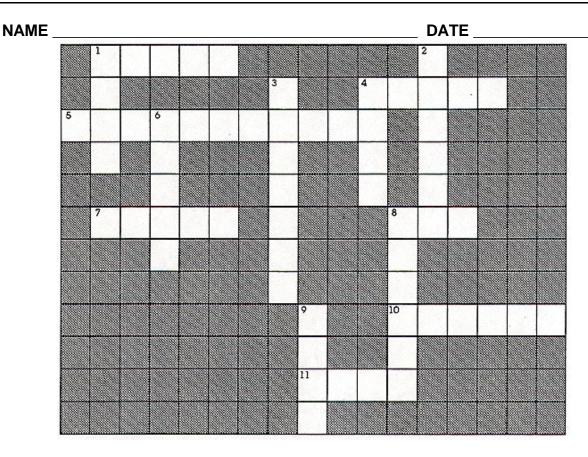
Have students complete the puzzle in pairs. Allow 5 minutes. Then, review the answers as a large group.

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Answers:

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# **HIV/AIDS Crossword Puzzle Worksheet**



# ACROSS

- 1. A communicable disease is one you can \_\_\_\_\_.
- 4. Babies can be born with illnesses they get from their parents' \_\_\_\_\_, but HIV isn't one of those.
- 5. Unlike many diseases, HIV is \_\_\_\_\_.?
- 7. People can get HIV if they shoot
- 8. HIV can pass when two people have
- 10. When people don't know the facts they often spread \_\_\_\_\_.
- Some germs can be spread indirectly through eating contaminated (unclean) \_\_\_\_\_, but HIV can't be spread that way.

# DOWN

- 1. Unfortunately, there is no \_\_\_\_\_ for HIV.
- 2. Many kinds of airborne illnesses can be passed by a \_\_\_\_\_, but HIV cannot.
- 3. A \_\_\_\_\_ protects healthy people from a particular disease.
- 4. Any communicable disease is caused by a \_\_\_\_\_.
- 6. HIV is a germ called a \_\_\_\_\_.
- 8. People who don't learn the facts about things are often \_\_\_\_\_.
- 9. Now that you know the facts about HIV, you can be \_\_\_\_\_.

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